



UNITED STATES PATENT AND TRADEMARK OFFICE

mn

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,820	01/17/2002	Takako Hirose	2002_0035A	5390

52349 7590 05/30/2007
WENDEROTH, LIND & PONACK L.L.P.
2033 K. STREET, NW
SUITE 800
WASHINGTON, DC 20006

EXAMINER

NGUYEN, MINH CHAU

ART UNIT	PAPER NUMBER
----------	--------------

2145

MAIL DATE	DELIVERY MODE
-----------	---------------

05/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/046,820

Applicant(s)

HIROSE ET AL.

Examiner

MINH-CHAU NGUYEN

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to the amendment of the applicant filed on 05/27/2007.

Claims 1-20 are presented for further examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharpe (US 7,007,237 B1).
2. Claim 1, Sharpe teaches a hypertext displaying apparatus for downloading hypertext data (i.e. a URL related to a particular web page 108) from a server device (i.e. web server 104) coupled to said hypertext display apparatus via network (i.e. internet 106) and displaying a content represented by the hypertext data (i.e. XYZ.COM web page content 120) (figure 1), said hypertext displaying apparatus comprising:

download means for downloading, when a link destination is designated, hypertext data at the designated link destination from the server device via the network (i.e. downloading a requested XYZ web page at the designated link

destination (i.e. <http://www.xyz.com>) from the web server 104 via the internet 106) (figure 1; and Col. 3, L. 66-Col. 4, L. 3, L. 49-Col. 5, L. 24);

stored data storage means for storing, as stored data, hypertext data selected by a user from among the hypertext data having been downloaded by said download means (i.e. the web page, has been downloaded, is stored in cache; and an indicator for this web page is added to a history list) (abstract; and Col. 3, L. 28-34);

display means for displaying a content represented by the stored data or a content represented by hypertext data which is newly downloaded by said download means (i.e. displaying the XYZ.COM web page content in figure 1) (Col. 4, L. 49-Col. 5, L. 13);

displaying history storage means for storing, in a displaying history at least one content represented by the hypertext data newly downloaded by said download means, wherein the displaying history is in accordance with an order in which the at least one content is displayed by said display means (i.e. "During the browsing process, the browser 302 stores in a buffer or in cache 310 a history list of recently viewed or visited web pages. This list is typically a list of URL references but may also contain pointers to the object type code for the web page located in cache. The cache may operate on a First In, First Out basis so the most recently viewed pages remain in the cache memory". According to this paragraph, Sharpe does disclose a displaying history storage as a history list, and displaying history in accordance with an order in which the at least one

Art Unit: 2145

content is same as the First In, First Out basis) (abstract; and Col. 7, L. 35-57; and Col. 8, L. 19-47); and

redisplaying order control means for controlling, in accordance with the displaying history stored in said displaying history storage means, an order in which contents are redisplayed by the display means (i.e. user 102 can review at least one page (content) from the history list which is stored in the cache memory. Moreover, there is a phrase in Sharpe discloses "the browser automatically initiates a command to fetch and display the web page at the top of the history list or the next item in the list if scrolling through the list" which does teach an order in which the at least one page (content) is redisplayed in the displaying history list) (abstract; and Col. 7, L. 35-57; and Col. 8, L. 19-47), wherein:

when the content represented by the stored data is displayed as a source content by said display means (i.e. XYZ.COM web page content, is displayed in figure 4), and a link destination indicated in the source content is designated (i.e. a link destination indicated in this content is <http://www.xyz.com>), said displaying history storage means stores the source content in the displaying history (i.e. this content is stored in history 404) (Col. 7, L. 35-Col. 8, L. 47; and

when a content at the link destination indicated in the source content is displayed by said display means (i.e. a content at the link destination is ABC.COM page content 416 in the XYZ.COM content in figure 4&5), and an instruction for displaying a content preceding the content at the link destination is

issued (i.e. an instruction for displaying a content preceding the content at the link destination is a "back control" 410 becomes active for displaying XYZ.COM page content which is preceding the ABC.COM page content) (figure 4-6), said redisplaying order control means allows contents stored in said displaying history storage means to be redisplayed by said display means in a sequential manner, at least back to the source content, which is stored in said displaying history storage means (i.e. at least one page (content) can be redisplayed in a sequential manner from the history list which is stored in the cache memory. Moreover, there is a phrase in Sharpe discloses "the browser automatically initiates a command to fetch and display the web page at the top of the history list or the next item in the list if scrolling through the list" which does teach an order in which the at least one page (content) is redisplayed in the displaying history list) (Col. 7, L. 35-57; and Col. 8, L. 19-47).

3. Claim 11 is corresponding program claim of apparatus claim 1. Therefore, it is rejected under the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2,6,8,10,12,16,18,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharpe, and further in view of Maddalozzo, Jr. et al. (Maddalozzo) (US 6,460,060 B1).
5. Claim 2, Sharpe teaches the stored data storage means assigns an indicator to each unit of hypertext data (i.e. web page) stored therein; and in the displaying history stored in said displaying history storage means, the source content is described in the form of an indicator (pointer) assigned thereto (abstract; and Col. 7, L. 35-57; and Col. 8, L. 19-47).

Sharpe fails to teach an identifier is assigned to each unit of hypertext data stored therein, the identifier being used for identifying a stored area of the hypertext data; and the source content is described in the form of an identifier assigned thereto. However, Maddalozzo, in the same field of endeavor having closely related objectivity, teaches an identifier is assigned to each unit of hypertext data stored therein, the identifier being used for identifying a stored area of the hypertext data (i.e. an identification of the web page or web page identifier) (Col. 1, L. 65-Col. 2, L. 6; and Col. 5, L. 26-42); and the source content is described in the form of an identifier assigned thereto (Col. 1, L. 65-Col. 2, L. 6; and Col. 5, L. 26-42).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Maddalozzo's teachings of an identifier is assigned to each unit of hypertext data stored therein, the identifier

being used for identifying a stored area of the hypertext data; and the source content is described in the form of an identifier assigned thereto, in the teachings of Sharpe in method and system for accessing web pages in the background, for the purpose of providing facilitate easy return and display a particular web page (i.e. source content) at a later time without having to retrace the original steps which led to discovery of the web page.

6. Claim 6, Sharpe teaches a storage (i.e. cache memory 310) means for storing hypertext data (i.e. web page 108) newly downloaded by said download means, and for storing, when a content at a link destination (i.e. www.xyz.com) indicated in a source content represented by the hypertext data stored in said stored data storage means is newly displayed by said display means, the hypertext data representing the source content, wherein said redisplaying order control means instructs said display means to redisplay a content based on the hypertext data stored in said storage means (i.e. user 102 can review at least one page (content) from the history list which is stored in the cache memory. Moreover, there is a phrase in Sharpe discloses “the browser automatically initiates a command to fetch and display the web page at the top of the history list or the next item in the list if scrolling through the list” which does teach an order in which the at least one page (content) is redisplayed in the displaying history list) (figure 1-6; and abstract; and Col. 3, L. 66-Col. 4, L. 3, L. 49-Col. 5, L. 24; and Col. 7, L. 35-57; and Col. 8, L. 19-47).

Sharpe fails to teach temporary storage means for temporarily storing the hypertext data and redisplaying the hypertext data stored in the temporary storage. However, Maddalozzo, in the same field of endeavor having closely related objectivity, teaches temporary storage means for temporarily storing the hypertext data (i.e. a history file is a temporary storage which records the web page visited and retains it for a period time) and redisplaying the hypertext data stored in the temporary storage (i.e. the user can revisit the web page by selecting it from the history file. Thus, the browser redisplay this web page based on the selected URL in the history file) (Col. 1, L 35-56; and Col. 4, L. 17-60).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Maddalozzo's teachings of temporary storage means for temporarily storing the hypertext data and redisplaying the hypertext data stored in the temporary storage, in the teachings of Sharpe in method and system for accessing web pages in the background, for the purpose of providing facilitate easy return and display a particular web page (i.e. source content) at a later time without having to retrace the original steps which led to discovery of the web page.

7. Claim 8, Sharpe and Maddalozzo disclose the invention substantially as claimed. Maddalozzo teaches said temporary storage means is operative to temporarily store only a version of any given hypertext data (Col. 1, L 35-56; and Col. 4, L.

17-60). Besides this Sharpe teaches a latest version of any given hypertext data (i.e. refresh control 406 is used to give out an updated information for web page that is equivalent to give out a latest version) (Col. 8, L. 5-7)

8. Claim 10, Sharpe teaches

the stored data storage means assigns an indicator to each unit of hypertext data (i.e. web page) stored therein; and

the hypertext displaying apparatus further comprises a storage (i.e. cache memory 310) means for storing a uniform resource identifier of hypertext data (i.e. an URL of the web page 108 such as <http://www.xyz.com>) newly downloaded by said download means, and for storing a uniform resource identifier (i.e. www.xyz.com) of the hypertext data representing the source content (i.e. xyz.com web page content);

wherein said displaying a content represented by the hypertext data stored in said stored data storage means as instructed by said redisplaying order control means, said display means reads the hypertext data from said stored at storage means based on the indicator (pointer) of the hypertext data stored in said storage means, so as to display the content represented by the hypertext data (i.e. user 102 can review a page (content) from the history list which is stored in the cache memory. Retrieving the content is based on the indicator (pointer) of the content in the history list. Moreover, there is a phrase in Sharpe discloses "the browser automatically initiates a command to fetch and display the

web page at the top of the history list or the next item in the list if scrolling through the list" which does teach an order in which the at least one page (content) is redisplayed in the displaying history list) (figure 1-6; and abstract; and Col. 3, L. 66-Col. 4, L. 3, L. 49-Col. 5, L. 24; and Col. 7, L. 35-57; and Col. 8, L. 19-47).

Sharpe fails to teach an identifier is assigned to each unit of hypertext data stored therein, the identifier being used for identifying a stored area of the hypertext data; and temporary storage means for temporarily storing the hypertext data and redisplaying the hypertext data stored in the temporary storage. However, Maddalozzo, in the same field of endeavor having closely related objectivity, teaches an identifier is assigned to each unit of hypertext data stored therein, the identifier being used for identifying a stored area of the hypertext data (i.e. an identification of the web page or web page identifier) (Col. 1, L. 65-Col. 2, L. 6; and Col. 5, L. 26-42); and temporary storage means for temporarily storing the hypertext data (i.e. a history file is a temporary storage which records the web page visited and retains it for a period time) and redisplaying the hypertext data stored in the temporary storage (i.e. the user can revisit the web page by selecting it from the history file. Thus, the browser redisplay this web page based on the selected URL in the history file) (Col. 1, L. 35-Col. 2, L. 6; and Col. 4, L. 17-Col. 5, L. 42; and Col. 7, L. 9-35).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Maddalozzo's teachings of an

Art Unit: 2145

identifier is assigned to each unit of hypertext data stored therein, the identifier being used for identifying a stored area of the hypertext data; and temporary storage means for temporarily storing the hypertext data and redisplaying the hypertext data stored in the temporary storage, in the teachings of Sharpe in method and system for accessing web pages in the background, for the purpose of providing facilitate easy return and display a particular web page (i.e. source content) at a later time without having to retrace the original steps which led to discovery of the web page.

9. Claims 12,16,18,20 are corresponding program claims of apparatus claims 2,6,8,10. Therefore, they are rejected under the same rationale.
10. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharpe, and further in view of Aldred et al. (Aldred) (US 6,209,036 B1).
11. Claim 9, Sharpe teaches the stored data deletion means for deleting hypertext data stored in said stored data storage means in accordance with an instruction given by the user (i.e. "if an error is returned to the computer in place of a requested web page, the web page is removed from the history list") (Col. 3, L. 28-37).

Sharpe fails to teach wherein said stored data deletion means is operative not to delete the hypertext data when the hypertext data has been registered in said displaying history storage mean. However, Aldred, in the same field of endeavor

having closely related objectivity, teaches wherein said stored data deletion means is operative not to delete the hypertext data when the hypertext data has been registered in said displaying history storage means (Col. 2, L. 55-61; and Col. 4, L. 10-15).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Aldred's teachings of wherein said stored data deletion means is operative not to delete the hypertext data when the hypertext data has been registered in said displaying history storage mean, in the teachings of Sharpe in method and system for accessing web pages in the background, for the purpose of providing facilitate easy return and display a particular web page (i.e. source content) at a later time without having to retrace the original steps which led to discovery of the web page.

12. Claim 19 is corresponding program claim of apparatus claim 9. Therefore, it is rejected under the same rationale.

13. Claims 3-5 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharpe, and further in view of Maddalozzo, Jr. et al. (Maddalozzo) (US 6,460,060 B1) and Aldred et al. (Aldred) (US 6,209,036 B1).

14. Claim 3, Sharpe teaches the stored data deletion means for deleting hypertext data stored in said stored data storage means in accordance with an instruction given by the user (i.e. "if an error is returned to the computer in place of a

Art Unit: 2145

requested web page, the web page is removed from the history list") (Col. 3, L. 28-37), wherein:

for each unit of hypertext data stored, the stored data storage means stores an indicator (i.e. pointer) and an acquisition source address (i.e. URL) of the hypertext data indicating an address of the hypertext data on the network (abstract; and Col. 4, L. 49-67; and Col. 7, L. 35-57);

in the displaying history stored in said displaying history storage means, the source content is described in the form of an indicator (i.e. pointer) assigned thereto and an acquisition source address (i.e. URL) of the hypertext data representing the source content (abstract; and Col. 4, L. 49-67; and Col. 7, L. 35-57);

Sharpe fails to teach for each unit of hypertext data stored, the stored data storage means stores an identifier of the hypertext data, and in the displaying history stored in said displaying history storage means, the source content is described in the form of an identifier assigned thereto, and if the hypertext data representing a source content to be redisplayed has been deleted by said stored data deletion means, said redisplaying order control means instructs said download means to again download the hypertext data representing the source content based on the acquisition source address, so that the downloaded hypertext data is displayed by said display means. However, Maddalozzo and Aldred, in the same field of endeavor having closely related objectivity, Maddalozzo teaches for each unit of hypertext data stored, the stored data

storage means stores an identifier of the hypertext data (i.e. the history file stores the web page that includes its identifier) (Col. 1, L. 65-Col. 2, L. 6; and Col. 4, L. 17-31; and Col. 5, L. 26-42); and in the displaying history stored in said displaying history storage means, the source content is described in the form of an identifier assigned thereto (i.e. the browser stores the identifier of the web page in the history record) (Col. 1, L. 65-Col. 2, L. 6; and Col. 4, L. 17-31; and Col. 5, L. 26-42); and Aldred teaches if the hypertext data representing a source content to be redisplayed has been deleted by said stored data deletion means, said redisplaying order control means instructs said download means to again download the hypertext data representing the source content based on the acquisition source address, so that the downloaded hypertext data is displayed by said display means (Col. 2, L. 55-61; and Col. 4, L. 10-15).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Aldred's teachings of if the hypertext data representing a source content to be redisplayed has been deleted by said stored data deletion means, said redisplaying order control means instructs said download means to again download the hypertext data representing the source content based on the acquisition source address, so that the downloaded hypertext data is displayed by said display means, with Maddalozzo's teachings of for each unit of hypertext data stored, the stored data storage means stores an identifier of the hypertext data, in the displaying history stored in said displaying history storage means, the source content is described

in the form of an identifier assigned thereto, in the teachings of Sharpe in method and system for accessing web pages in the background, for the purpose of providing facilitate easy return and display a particular web page (i.e. source content) at a later time without having to retrace the original steps which led to discovery of the web page.

15. Claim 4, Sharpe and Maddalozzo and Aldred disclose the invention substantially as claimed. Aldred teaches identicalness determination means for determining identicalness between the hypertext data representing a source content to be redisplayed and the hypertext data stored in said stored data storage means (Col. 2, L. 38-51; and Col. 4, L. 22-36; and Col. 39-65; and Col. 9, L. 41- Col. 10, L. 50); and

Aldred teaches when said identicalness determination means denies identicalness between the hypertext data associated with the source content, said redisplaying order control means instructs said download means to again download the hypertext data representing the source content based on the acquisition source address, so that the downloaded hypertext data is displayed by said display means (Col. 2, L. 38-51; and Col. 9, L. 41-Col. 10, L. 50).

Besides this, Maddalozzo teaches an identifier is assigned to the hypertext data representing the source content (Col. 1, L. 35-Col. 2, L. 6; and Col. 4, L. 17-Col. 5, L. 42),

16. Claim 5, Sharpe and Maddalozzo and Aldred disclose the invention substantially as claimed. Aldred teaches the identicalness determination means determines identicalness between the hypertext data associated with the source content based on the acquisition source address (Col. 2, L. 38-51; and Col. 4, L. 22-36; and Col. 39-65; and Col. 9, L. 41- Col. 10, L. 50).

17. Claims 13-15 are corresponding program claims of apparatus claims 3-5.

Therefore, they are rejected under the same rationale.

18. Claims 7, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharpe and Maddalozzo as applied to claims 1,11 above, and further in view of Rubinstein et al. (Rubinstein) (5,913,215).

19. Claim 7, Sharpe and Maddalozzo are relied upon for the disclosure set forth in the previous rejection. Maddalozzo teaches the temporary storage (i.e. history file) (Col. 1, L. 35-56; and Col. 4, L. 17-31). Sharpe and Maddalozzo fail to teach said temporary storage means is operative not to store the same hypertext data in a redundant manner. However, Rubinstein, in the same field of endeavor having closely related objectivity, teaches said temporary storage means is operative not to store the same hypertext data in a redundant manner (Col. 3, L. 1-15; and Col. 15, L. 50-65).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Rubinstein's teachings of said temporary storage means is operative not to store the same hypertext data in a

Art Unit: 2145

redundant manner, with Maddalozzo's teaching of method and system for searching web browser history, in the teachings of Sharpe in method and system for accessing web pages in the background, for the purpose of providing facilitate easy return to a particular web page, which its redundant is filtered, at a later time without having to retrace the original steps which led to discovery of the web page.

20. Claim 17 is corresponding program claim of apparatus claim 7. Therefore, it is rejected under the same rationale.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH-CHAU N. NGUYEN whose telephone number is (571)272-4242. The examiner can normally be reached on Monday-Friday from 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JASON D. CARDONE can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2145

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Minh-Chau Nguyen
Art Unit: 2145



JASON CARDONE
SUPERVISORY PATENT EXAMINER